APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

GORSKAYA, I.A.; KOTEL'NIKOVA, A.V.; DRIZOVSKAYA, S.Yu.

Coenzyme A content of various materials of microbiological and animal origin. Biokhimiia 29 no.3:566-569 My-Je '64. (MIRA 18:4)

1. Institut biokhimii imeni Bakha AN SSSR, Moskva.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTELNIKOVA, A. V.; ZVYAGILSKAYA, R. A.

"A Study of Oxidative Phosphorylation and ATPase Activity of Mitochondria from Yeast Endomyces Magnusii."

report submitted for 6th Intl Biochemistry Cong, New York City, 26 Jul-1 Aug 1964.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

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KOTEL'NIKOVA, A. V., doktor biolog. nauk

Respiration and the conversion of energy in living cells.
Priroda 52 no.1:54-60 '63. (MIRA 16:1)

1. Institut biokhimii AN SSSR, Moskva.

(Oxidation, Physiological)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOVA, A. V. (Moskva)

Intermediate reactions in the processes of oxidative phosphorylation. Usp. biol. khim. 4:173-192 '62. (MIRA 15:7)

(PHOSPHORYLATION)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOVA, A.V.; SOLOMATINA, V.V.

Investigating some transformations of nucleotides from aqueous extracts of the liver and spleen of a rabbit. Dokl. AN SSSR 143 no.2:452-455 Mr '62. (MIRA 15:3)

1. Institut biokhimii im. A.N.Bakha AN SSSR. Predstavleno akademikom A.I.Oparinym.

(NUCLEOSIDE MONOPHOSPHATE KINASE)
(ADENYLATE KINASE)
(LIVER)
(SPLEEN)

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KOTEL'NIKOVA, A.V.; SOLOMATINA, V.V.; GORSKAYA, I.A.

Adenosinephosphoric acid sontent of the rat liver and muscles in dinitrophenol poisoning. Biokhimiia 25 no.6:1085-1091 N-D '61. (MIRA 14:5)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R., Moscow.

(PHENOL--TOXICOLOGY) (MUSCLES)
(LIVER) (ADENOSINEPHOSPHORIC ACIDS)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KUTELNIKOVA, A.V., SOLOMATINA, V.V., GORSKAYA, I.A., (USSR)

"Changes in ATP and other Nucleotide Contents in Rat Liver and Muscle in 2,4-Dinitrophenol Poisoning."

Report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug 1961.

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

PARNAS, Yakov [Yakub-Karl] Oskarovich, akademik [deceased]; DZBANOVSKAYA, A.Ye. [translator]; ROZENGARD, V.I. [translator]; TOLKACHEVSKAYA, N.F. [translator]; STEPANENKO, B.N., otv.red.; BRAUNSHTEYN, A.Ye., red.; KOTEL'NIKOVA, A.V., red.; SEVERIN, S.Ye., red.; ENGEL'GARDT, V.A., red.; KOLPAKOVA, Ye.A., red.izd-va; POLENOVA, T.P., tekhn.red.

[Selected works] Izbrannye trudy. Moskva, Izd-vo Akad.nauk SSSR, 1960. 491 p. (MIRA 13:8)

(BIOCHEMISTRY)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

SOV/20-128-1-52/58

Separation of Adenylatkinase and Nucleoside Monophosphatkinase From the Water-soluble Fraction of the Liver

ASSOCIATION: Laboratoriya fiziologicheskoy khimii Akademii nauk SSSR (Laboratory of Physiological Chemistry of the Academy of Sciences, USSR)

PRESENTED: May 5, 1959, by A. I. Oparin, Academician

SUBMITTED: April 26, 1959

Card 3/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

Separation of Adenylatkinase and Nucleoside Monophosphatkinase From the Water-soluble Fraction of the Liver

experimental methods were the same as in reference 1. The following conclusions may be drawn from the investigations. The enzymes adenylatkinase and Numoki could be completely separated by fractionating the aqueous liver extract of rabbits by means of alcohol. Adenylatkinase is contained in the fraction of 0-20% and Numoki in the fraction of 40-50% of alcohol. It was for the first time that these enzymes could be separated. Adenylatkinase catalyzes the phosphate transference only among adenine nucleotides. Numoki apparently catalyzes this reaction between nucleoside triphosphate and nucleoside monophosphate under the following conditions: 1) Nucleotides of every couple have to contain different bases; 2) one part of every nucleotide couple has to be an adenine nucleotide. Enzyme preparations from hog kidney (Ref 4) and calf kidney (Ref 5) showed the obligatory participation of adenine nucleotides in the numoki reaction. The data found prove these conclusions also with regard to water soluble Numoki from rabbit kidney. There are 3 figures, 3 tables, and 5 references, 3 of which are Soviet.

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

17(3)

SOV/20-128-1-52/58

AUTHORS: Dovedova, Ye. L., Kotel'nikova, A. V.

TITLE: Separation of Adenylatkinase and Nucleoside Monophosphatkinase From the Water-soluble Fraction of the Liver

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 1, pp 194-197 (USSR)

ABSTRACT: The present paper gives data on the preparative separation of the enzymes mentioned in the title. The separation was caused by fractionating aqueous liver solutions by means of alcohol. The substrates used were: adenosintriphosphate (ATP) and adenosin-5'-phosphate (AFP), purified in rectifying columns from commercial ATP by means of anionites AV-16 or AV-17; uridin-5'-phosphate (UFP), produced from yeast and purified by means of AV-16, as well as imported; inosin-5'-phosphate (IFP), guanosin-5'-phosphate (GFP), uridintriphosphate (UTP) - imported goods for sale; inosintriphosphate (ITP), made available by V. Z. Gorkin of the Institut biologicheskoy i meditsinskoy khimii AMN SSSR (Institute of Biological and Medical Chemistry AMS USSR). The reaction to nucleoside monophosphatkinase (numoki) was mainly investigated by means of UFP and ATP. The

Card 1/3

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KOTEL'NIKOVA, A.V.; DOVEDOVA, Ye. L.; SOLOMATINA, V.V.

Separation of adenosine phosphoric acids by the use of Russian anionibes. Biokhimiia 24 no.2:215-221 Mr-Ap '59. (MIRA 12:7)

1. Laboratory of Physiological Chemistry, Academy of Sciences of the U.S.S.R., Moscow.

(ION EXCHANGE RESINS,
anion exchange resins, determ. of ATP (Rus))
(ADENYLPYROPHOSPHATE, determ.
anion exchange resin technic (Rus))

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

On the Specificity of the Water Soluble "Adenylate" Kinase From the Liver

SOV/20-123-2-33/50

showed any activity. It may be concluded from these results that in aqueous extracts from the rabbit liver the "adenylate" kinase (specific for adenine nucleotides) as well as the numoki are contained. There are 3 figures and 12 references, 3 of which are Soviet.

ASSOCIATION: Laboratoriya fiziologicheskoy khimii Akademii nauk SSSR (Laboratory of Physiological Chemistry of the Academy of Sciences, USSR)

PRESENTED: July 2, 1958, by A. I. Oparin, Academician

SUBMITTED: June 26, 1958

Card 3/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

(like numoki). With the yeast enzyme it was proved that numoki is different from adenylate kinase. With liver enzymes this problem remains unsolved. The authors investigated this problem in aqueous extracts from rabbit liver according to the method given in reference 1. Figures 1 and 2 give the experimental results of the activity determination of the "adenylate" kinase and numoki in one and the same liver extract (treated with HCl). The reaction products were separated by paper chromatography and quantitatively determined. From the results may be seen that the water soluble liver "adenylate" kinase is, like the myokinase, a specific "adenine" enzyme and differs from numoki. Figure 3 gives the results of the activity determination of numoki after the heating of the dialyzed aqueous liver extracts for 2 minutes at 60° and at pH 7 (Ref 12). The numoki reaction was clearly shown. The negative numoki reaction in extracts treated with HCl were explained by the higher resistance of the numoki to heating in neutral medium compared with that of the "adenylate" kinase. On a heating of the extracts up to 80° for 2 minutes at pH 7 neither of the two ferments

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

17(3)

AUTHORS: Kotel'nikova, A. V. Dovedova, Ye. L. SOV/20-123-2-33/50

TITLE: On the Specificity of the Water Soluble "Adenylate" Kinase From the Liver (O spetsifichnosti vodorastvorimoy adenilatkinazy iz pecheni)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 2, pp 327 - 330 (USSR)

ABSTRACT: In earlier papers of the first mentioned author it was proved that the animal liver contains the ferment (phosphomutase ADF) mentioned in the title, which highly differs from that from the muscles (myokinase) (Ref 1). Since in living organisms free nucleotides were found together with others, as adenine, purine and pyrimidine bases (Ref 2), in animal tissues and in yeast enzymes (Refs 3, 4) were found that were called nucleoside-monophosphate kinases (abbreviated: numoki). They catalyzed the phosphate transfer from nucleoside triphosphate to nucleoside monophosphate, however, with different purine- or pyrimidine bases. In this connection the question arose if the water soluble liver "adenylate" kinase is a specific "adenine" enzyme (like the myokinase, Ref 3) or if it is specific within a wider range

Card 1/3

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

Abs Jour : Ref Zhur Biol., No 3, 1959, 12531

which possessed a high specific radioactivity. By a study of the properties of this substance it was established that it contained S--Sgroups and the property of coenzyme A (the ability to catalyze acetylized amino-azobenzene. The recovered substance was different from phosphoryl coenzyme A in that it did not vie a positive reaction on the free SH-groups after treatment with alkali and had a definite mobility with paper chromatography using N-propanol--NH_3--H_2O as the solvent. -- V.I. Rosengart

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

USSR/Human and Animal Physiology - Metabolism. T

Abs Jour : Ref Zhur Biol., No 3, 1959, 12531

Author : Kotel'nikova, A.V.

Inst : AS USSR

Title : Role of Metabolites of Krenzim A in Phosphorus Metabolsim of Liver of Animals.

Orig Pub : V sb.: Izuch. zhivotn. organizma. M., AN SSSR, 1958, 88-95

Abstract : Rats were injected with phosphate P^{32}; after 15 - 30 minutes the animals were sacrificed, the livers were removed, and after precipitation of the protein with trichloracetic acid the fraction of Ba-non-soluble phosphorus compounds was isolated. Paper chromatography of this fraction revealed that in addition to ATP, ADP, and AMP, it also contained one adenine derivative

Card 1/2

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

A. V. KOTEL'NIKOVA and G. D. KRECHETOVA

"On special problems of the pathology of carbohydrate metabolism"

The Chemistry and Metabolism of Carbohydrates in Animal and Plant Organisms. Conference in Moscow. January 28 to January 30 1958.

(VAN SSSR, No 6, 58)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

Kotelnikova, A. V.

USSR / General Biology - Physical and Chemical Biology. B

Abs Jour: Ref Zhur-Biol., No 9, 1958, 37908.

Author : Kotelnikova, A. V.
Inst : Not given.
Title : New Data on the Nature and Role of Free Nucleotides and Some of Their Derivatives.

Orig Pub: Uspekhi sovrem. biologii, 1957, 43, No 2, 133-153.

Abstract: The distribution of free monoribonncleotides in tissues of living organisms is described, as well as their synthetic pathways. All the detected ribonucleotides belong to the derivatives of nucleoside-5^1-phosphates. Data are given on conversation of ribonucleotides, their derivatives, and the role of enzymes in the conversion and biosynthesis of a number of substances.

Card 1/2

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KOTEL'NIKOVA, A.V.; SOLOMATINA, V.V.

Radiophosphorus in the study of adenosinetriphosphoric acid metabolism in rabbits in alloxan diabetes [with summary in English]. Biokhimiia 22 no.6:954-962 N-D '57. (MIRA 11:2)

1. Laboratoriya fiziologicheskoy khimii Akademii nauk SSSR, Moskva.
(DIABETES MELLITUS, experimental,
ATP metab., radiophosphorus study (Rus))
(ADENYLPYROPHOSPHATE, metabolism,
in exper. diabetes mellitus, radiophosphorus study (Rus))

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KOTEL'NIKOVA, A. V.

KOTEL'NIKOVA, A. V.

Isobutylene method of determining specific activity of inorganic phosphates [with summary in English]. Biokhimiia 22 no.4:725-729 Jl-Ag '57. (MIRA 10:11)

1. Laboratoriya fizologicheskoy khimii AN SSSR, Moskva.
(PHOSPHATES, determination,
isobutylene method in determ. of specific activity of inorganic cpds. (Rus))

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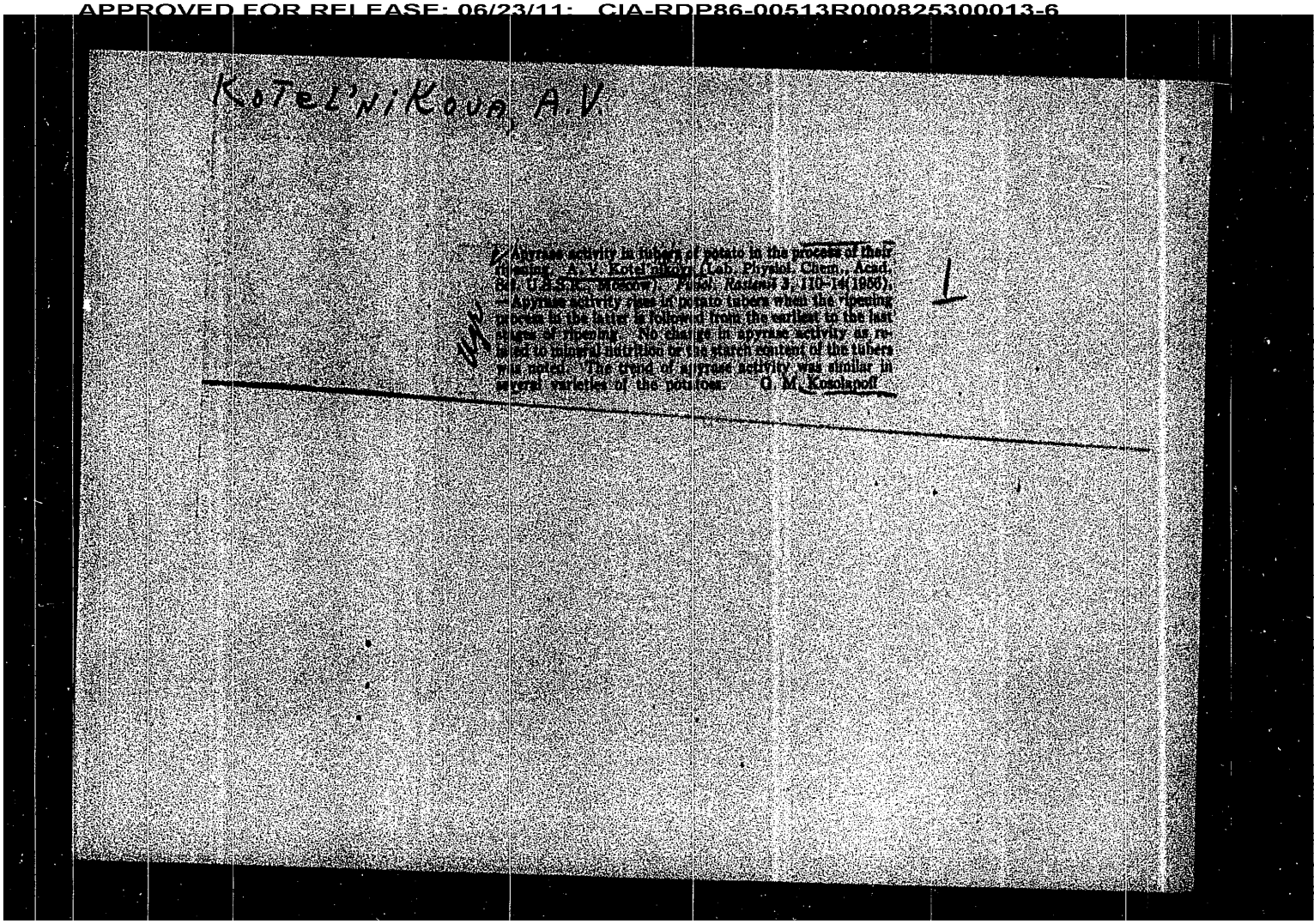

KOTEL'NIKOVA, A.V.

Apyrase activity in tubers of potato in the process of their ripening. A. V. Kotel'nikova (Lab. Physiol. Chem., Acad. Sci. U.S.S.R., Moscow). *Physiol. Rastenii* 3, 110–14(1956). — Apyrase activity rises in potato tubers when the "ripening" process in the latter is followed from the earliest to the last stages of ripening. No change in apyrase activity as related to mineral nutrition or the starch content of the tubers was noted. The trend of apyrase activity was similar in several varieties of the potatoes. G. M. Kosolapoff

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BELITSER, V.A.; KOTEL'NIKOVA, A.V.; LYUBIMOVA, M.N.; SEVERIN, S.Ye.; STEPANENKO, B.N.; ENGEL'GARDT, V.A.

Second International Conference on Lipids and the Third International Biochemical Congress. Vop.med.khim. 2 no.1:73-79 Ja-F '56. (MLRA 9:9)
(GHENT--LIPIDS--CONGRESSES)
(BRUSSELS--BIOCHEMISTRY--CONGRESSES)

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KOTEL'NIKOVA, A.V.

[Variations in apyrase activity in potato tubers; reports and papers of the Third International Congress of Biochemistry, Brussels, 1-6 August, 1955] Ob izmeneniiakh apiraznoi aktivnosti v klubniakh kartofelia; soobshcheniia i doklady na III Mezhdunarodnom biokhimicheskom kongresse, Briussel', 1-6 avgusta 1955 g. Moskva, Izd-vo Akad. nauk SSSR, 1955. 21 p. [Parallel texts in Russian and French]

(ADENOSINETRIPHOSPHATASE) (MIRA 11:6)
(POTATOES)

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KOTEL'NIKOVA, A.V.

(5)

Some variety peculiarities of activity of apyrase in potato tubers. A. V. Kotel'nikova and V. V. Solomatina. *Doklady Akad. Nauk S.S.S.R.* 95, 325-7(1954).—The enzymes concerned with transformations of adenosinephosphates, namely apyrase and acid phosphatase, were exaind. in the tubers of various varieties of potatoes. A considerable difference in the enzymic activities of 3 varieties studied was found, indicating a particularly important role of apyrase activity at the stage of tuber development at which intensive starch synthesis takes place. Generally, the varieties with low starch content have low apyrase activity, while the high-starch forms show a high activity of the enzyme. The phosphatase activity was essentially the same in all 3 varieties.

G. M. Kosolapoff

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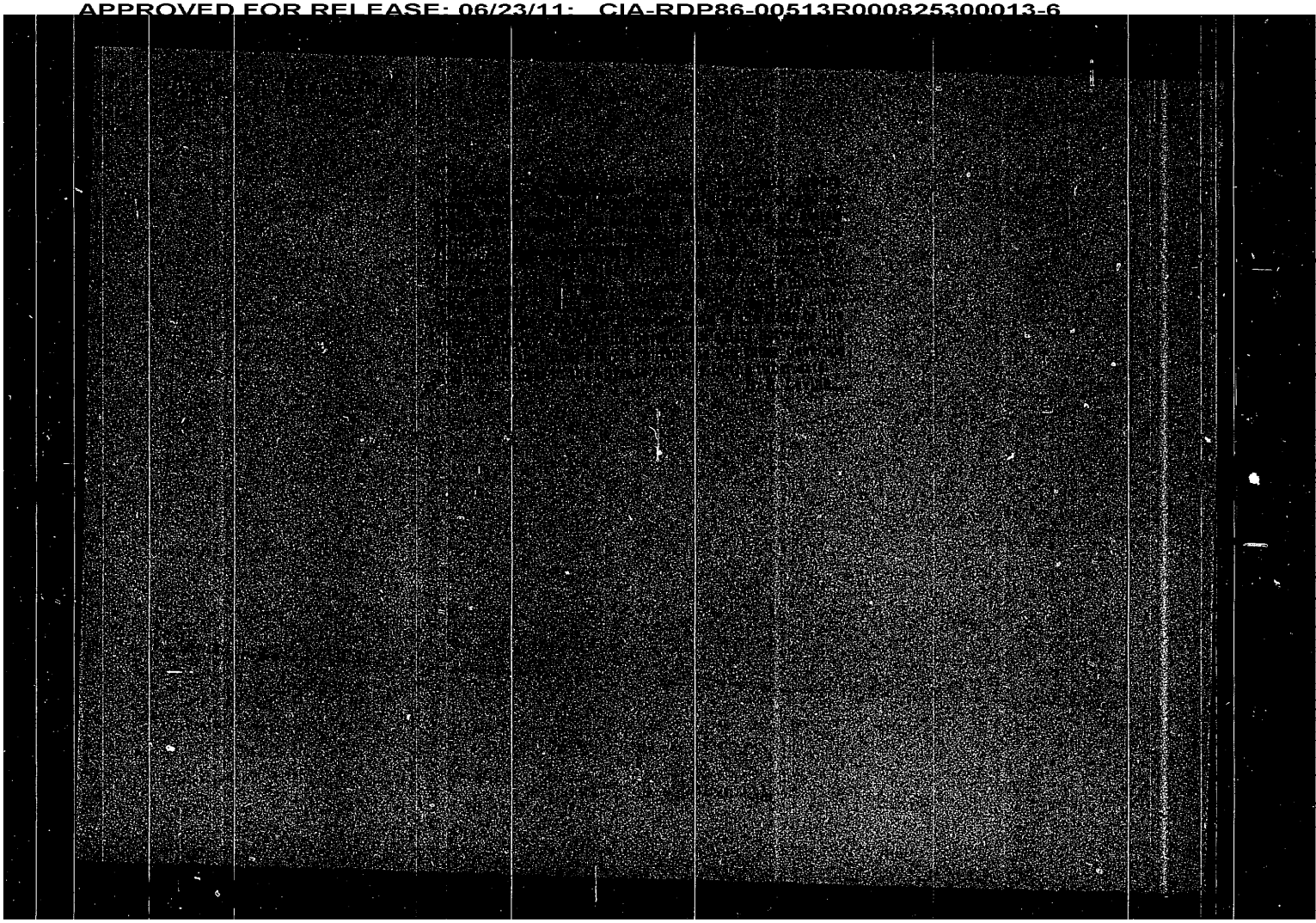

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KOTEL'NIKOVA, A.V.

Investigation of phosphomutase and apirase activity in potato tuber extracts. Biokhimiia 18 no.6:661-667 N-D '53. (MLRA 6:12)

1. Laboratoriya fiziologicheskoy khimii Akademii nauk SSSR, Moscow.
(Phosphomutase) (Apirase) (Potatoes)

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KOTEL'NIKOVA, A. V.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Biological Chemistry

(3)

Preparation and properties of purified adenosinediphosphate phosphomutase (myokinase) of muscles. A. V. Kotel'nikova (Lab. Physiol. Chem., Acad. Sci. U.S.S.R., Moscow). *Biokhimiya* 18, 522-30(1953).—Ground muscle was extd. in the cold with 3 vol. of cold H_2O for 1 hr., centrifuged and filtered. Fractionation for purification of myokinase (I) was by a simplified procedure of Kalckar (*C.A.* 37, 4409⁹). Heating the muscle extd. at 90° for 1–2 min. in HCl had no effect on the activity of I. The modified procedure affords a 12–16-fold purification accompanied by a 25–42-fold concn. in the activity of the I. Unlike the nonpurified ext. the purified I is unstable in media of acid and neutral reaction, and is more easily inactivated by CCl_3CO_2H. The stability of I in nonpurified exts. is due to a specific stabilizer, and not to any structural differences. Mg activates I up to 60–95%. B. S. Levine

Full translation - NIH

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KOTEL'NIKOVA, A.V.

Critical remarks on V.O.Tauson's theory on exothermic (exergonic) biological syntheses. Biokhimiia 18 no.4:504-507 Jl-Ag '53. (MLRA 6:8)
(Tauson, Vladimir Ottonovich, 1894-1946) (Biochemistry)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOVA, A. V.

Potatoes

Some data on hexokynase activity in potato tubers. Biokhimiia 17 no. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1953, Uncl.

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CA

11 D

The effect of conditions of growing of potato on apyrase activity in the tubers. A. V. Kotel'nikova. *Doklady Akad. Nauk S.S.S.R.* **78**, 995-8 (1951).—Potatoes grown either with rich mineral-org. fertilizer supply, or rich mineral and moderate org. supply, or without fertilizer supply, showed that apyrase activity rises with development in all 3 types, particularly large increase taking place in specimens without fertilizer. In mature tubers the activity is substantially alike in all 3 cases, but during ripening, the fertilizer-less specimens had lowest activity. Apyrase appears to have a role in stabilizing the resting state in the tubers. G. M. Kosolapoff

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110

Hexokinase in potato tubers. A. V. Kotel'nikova. *Doklady Akad. Nauk S.S.S.R.* **78**, 787–90 (1951).—Hexokinase activity of aq. exts. of the tubers, detd. by the decrease of the sum of easily hydrolyzable and inorg. P, is very low; 0.01 *M* KCN exts. give similar results. The apyrase activity of such exts. is high. Autolysis causes a further drop of hexokinase activity. Use of K ion, instead of Na, and detns. of activity in total tuber homogenates or plant sprouts also give similar results. Use of 0.1 *M* NaF increased the rate of P transfer to glucose but the effect was erratic. Apyrase activity in the tuber ext. increases with the degree of satn. of the soln. with $(NH_4)_2SO_4$, while hexokinase activity appears only in the fraction pptd. by 0.3 satn.; after suppression of residual apyrase by NaF, the hexokinase activity may be shown very clearly.

G. M. Kosolapoff

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KOTEL'NIKOVA, A. V.

USSR/Biology (Agriculture) - Starch From Potatoes Sep/Oct 51

"Starch and Its Formation in Potatoes," B. N. Stepanenko, Ye. L. Rosenfel'd, A. N. Petrova, A. V. Kotel'nikova, Moscow

"Uspekh Sovrem Biol" Vol XXXII, No 5 pp 193-231

Potatoes are a very important crop in the USSR; 7.7 million hectares were planted under potatoes before World War II and the acreage was 5% higher in 1950. Yield from 1 hectare corresponds to 1,600 liters of alc, which may serve as raw material for synthetic rubber. While yields were raised by 21% during the past 10 yrs, the starch content is often inadequate. A number of interesting investigations on starch formation in potatoes was carried out at the Inst of Biochem imeni Bakh, Acad Sci USSR. This work and other data will help in raising the starch content. Reviews in detail the present status of the problem of phytochem starch formation.

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11A

Stability of adenosinetriphosphoric acid on storage. A. V. Kotel'nikova (Acad. Sci., Moscow). *Biokhimiya* 16, 150-5(1951).—The Ba salt of adenosinetriphosphoric acid can be safely kept for a year at room temp. in a desiccator or in a tightly closed container free from atm. moisture.

H. Priestley

1951

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOV, A.V.

Easy way of making a scenic diorama. Voen.med. zhur. no.9:75-78 S '51. (MLRA 9:9)

(DIORAMA)

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KOTELNIKOVA A. V.

6529. KOTELNIKOVA A. V. Mechanism of transfer of the adenylic system of high-energy phosphates in yeasts Doklady Akademii Nauk SSSR, Moscow 1950, 69/6 (837-840) Tables 3

Two possible transporting mechanisms of high-energy phosphates may be supposed to act in yeasts: (a) A phosphomutase may utilize adenylic acid (instead of ADP or ATP); (b) an enzyme system, still unknown, may exist in the yeast cell, adenylic acid playing the role of a phosphate accepter and ADP that of a phosphate donor. A phosphomutase would require the presence of hexokinase to function as an enzyme system; direct experimental evidence for a phosphomutase-transporting mechanism was obtained by separation of the two enzymes in a yeast extract, by 3 minutes' boiling of the neutralized solution, which reduced hexokinase activity to 4% of the original value, whereas the phosphomutase activity was reduced only to 61%. The fact that yeast extracts could split phosphate off ADP in presence of myosin may be regarded as further evidence in favour of a phosphomutase system since purified myosin splits only one equivalent of phosphate from ATP and does not split ADP at all. Magnesium ions were found to act as effecters of yeast phosphomutase.

Fuks - Zagreb

SO: Excerpta Medica, Section II, Vol III, No 12

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C.A.

11 A

Action of sodium fluoride on the activity of adenosinediphosphoric acid phosphomutase of animal tissues. A. V. Kotel'nikova (Lab. Physiol. Chem., Acad. Sci., Moscow). *Biokhimiya* **15**, 371–9(1950); cf. C.A. **43**, 6283h. NaF, the glycolytic poison, exerts no effect in 0.02 *M* concn. on the activity of hexokinase, but does inactivate 43–48% of the phosphomutase (I) of adenosinediphosphoric acid extd. from rabbit muscle, heart, and liver. The mechanism of inhibition by NaF differs from that of enolase, since increasing the concn. of inorg. P does not decrease the activity of I. H. Priestley

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KOTEL'NIKOVA, A. V.

(2)

Role of phosphates in biochemical reaction kinetics. A. V. Kotel'nikova. *Uspekhi Biol. Khim.* 1, 332–55 (1950).—Peptide synthesis, formation of creatine, cystathionine reactions, cozymase reactions, glutamine synthesis, and bioluminescence are discussed as related to phosphate participation. 148 references. Julian F. Smith

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KOTEL'NIKOVA, A.V.

Transfer by means of adenylic acid system of macroergic phosphates in yeast. C.R. Acad.Sci. U.R.S.S. '49, 69, 837-840. (MLRA 2:12)
(BA - AIII Ap '53:537)

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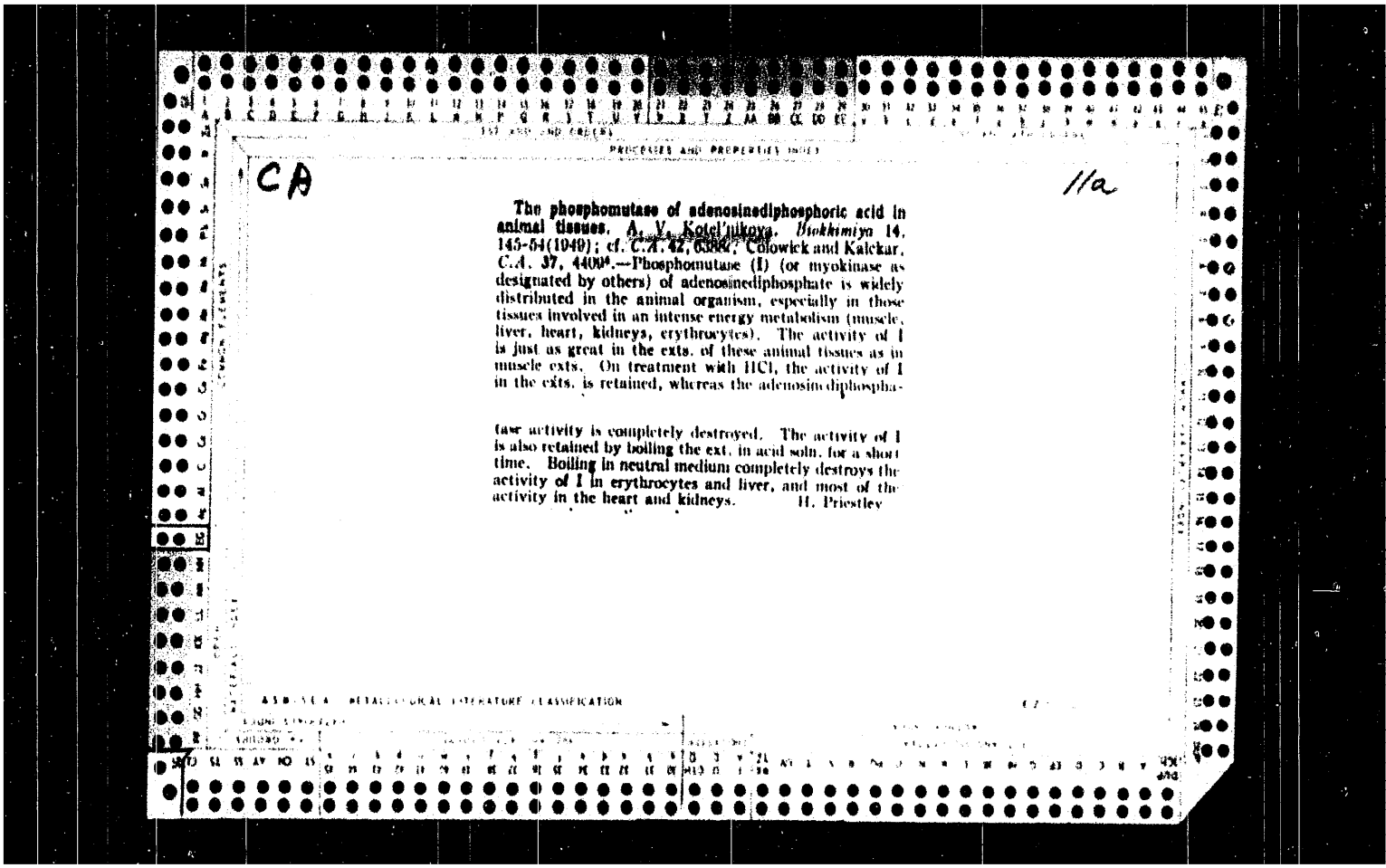

CA

11a

The phosphomutase of adenosinediphosphoric acid in animal tissues. A. V. Kotel'nikova. *Biokhimiya* 14, 145-54(1949); cf. *C.A.* 42, 6366f; Colowick and Kalckar, *C.A.* 37, 4409⁸.—Phosphomutase (I) (or myokinase as designated by others) of adenosinediphosphate is widely distributed in the animal organism, especially in those tissues involved in an intense energy metabolism (muscle, liver, heart, kidneys, erythrocytes). The activity of I is just as great in the exts. of these animal tissues as in muscle exts. On treatment with HCl, the activity of I in the exts. is retained, whereas the adenosinediphospha-

tase activity is completely destroyed. The activity of I is also retained by boiling the ext. in acid soln. for a short time. Boiling in neutral medium completely destroys the activity of I in erythrocytes and liver, and most of the activity in the heart and kidneys. H. Priestley

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KOTEL'NIKOVA, A. V.

PA 36/49T11

USSR/Chemistry - Adenosinephosphoric Acids
Chemistry - Deamination, of Adenosine-phosphoric Acids
Sep 48

"Deamination of Adenosinephosphoric Acid by Adenyl Deaminase With Liver Extracts as Catalysts," A. V. Kotel'nikova, Lab of Physiol Chem, Acad Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol LXII, No 2

Results of the experiment establish that increase in deamination of ADP (adenosinediphosphoric acid) in presence of liver extracts (processed, and

36/49T11

USSR/Chemistry - Adenosinephosphoric Acids (Contd)
Sep 48

unprocessed, by HCl) depends on content of phosphomutase of ADP in the liver extract, which forms adenylic acid from ADP, and is not distinguished from the phosphomutase from ADP from mice according to the nature of the catalyzed process. Submitted by Acad Ya. O. Parnas, 6 Jul 48.

36/49T11

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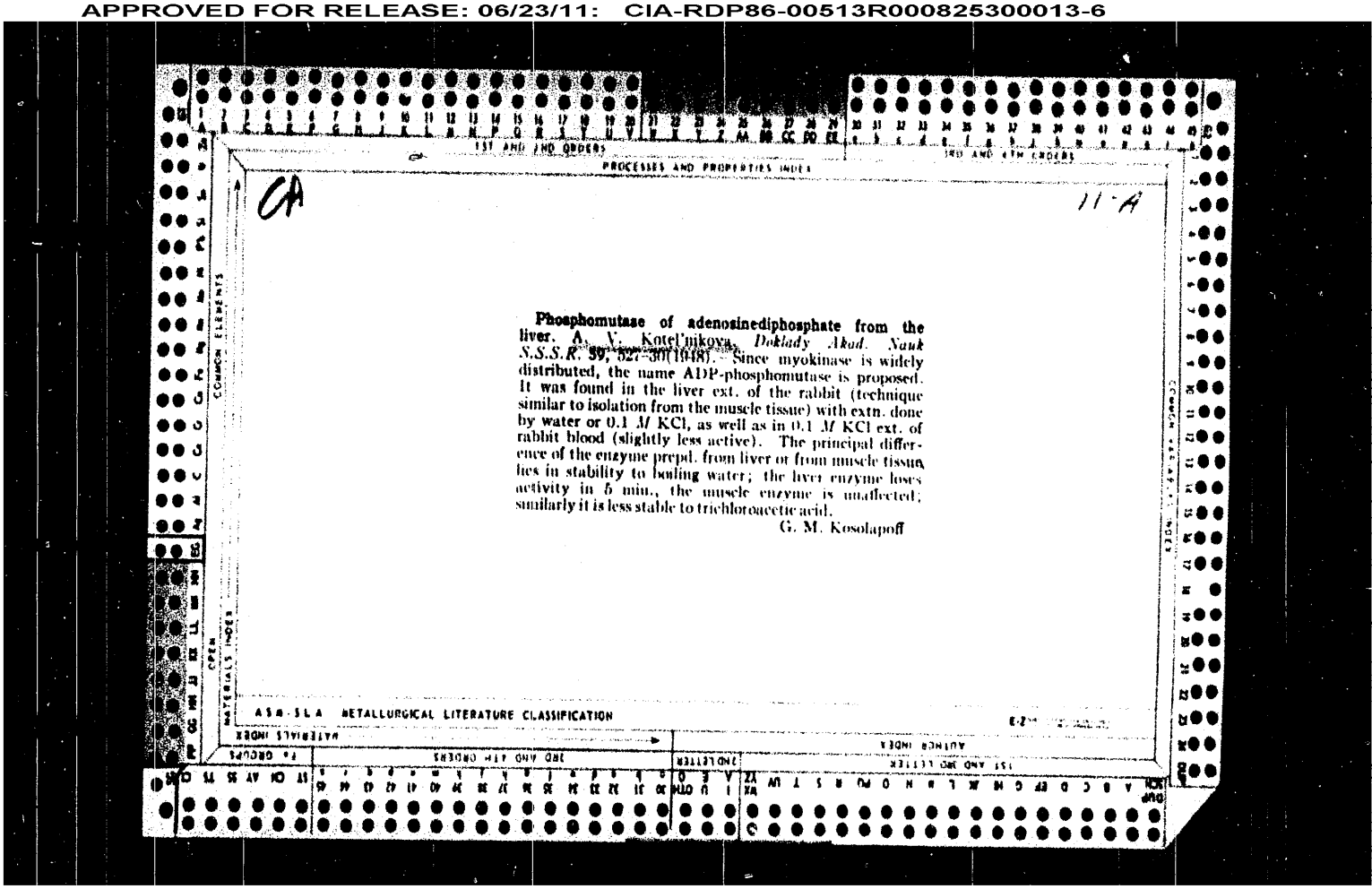

CA

11-A

Phosphomutase of adenosinediphosphate from the liver. A. V. Kotel'nikova. *Doklady Akad. Nauk S.S.S.R.* **59**, 527–30(1948). Since myokinase is widely distributed, the name ADP-phosphomutase is proposed. It was found in the liver ext. of the rabbit (technique similar to isolation from the muscle tissue) with extn. done by water or 0.1 *M* KCl, as well as in 0.1 *M* KCl ext. of rabbit blood (slightly less active). The principal difference of the enzyme prepd. from liver or from muscle tissue lies in stability to boiling water; the liver enzyme loses activity in 5 min., the muscle enzyme is unaffected; similarly it is less stable to trichloroacetic acid.

G. M. Kosolapoff

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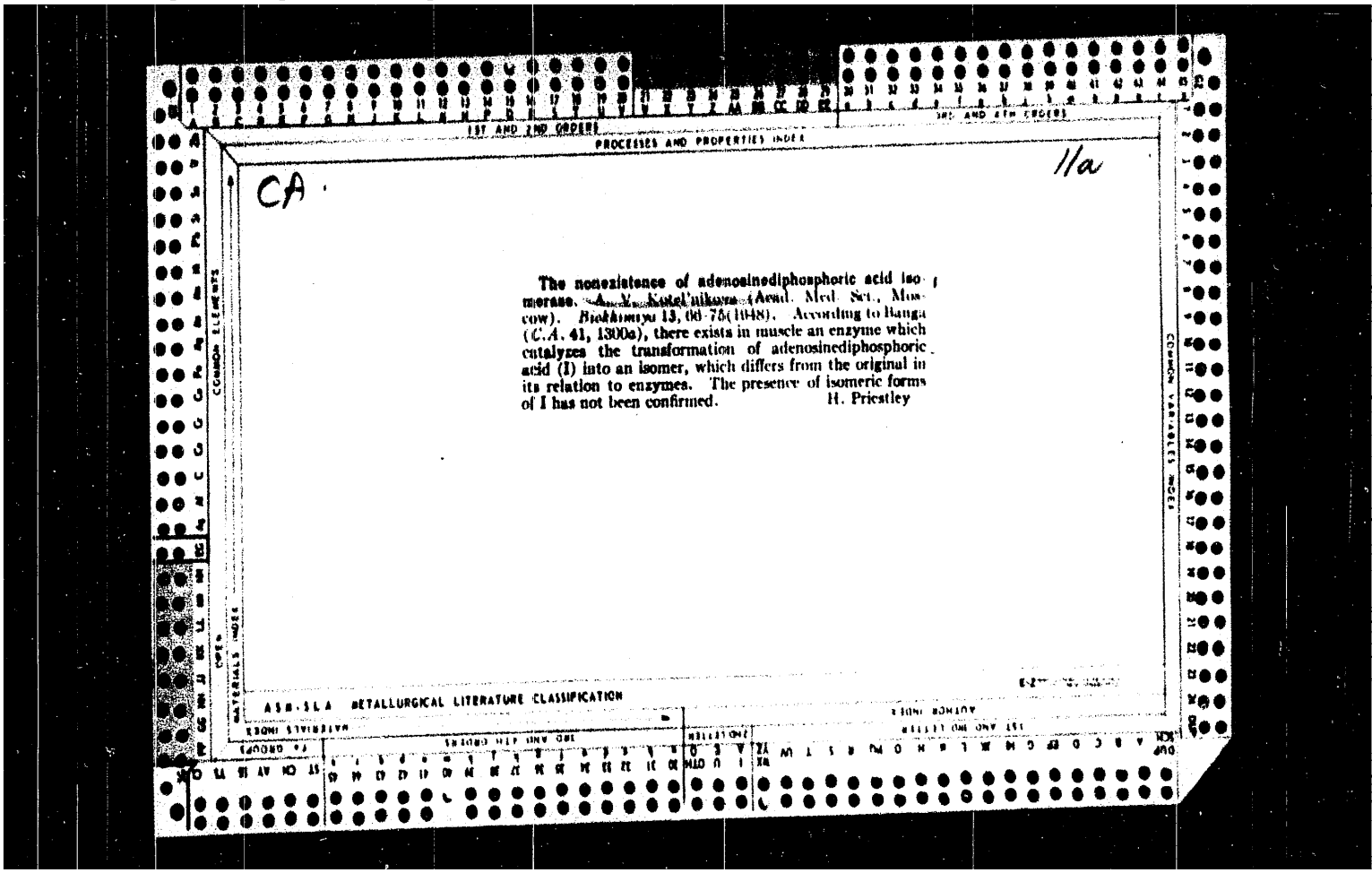

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KOTEL'NIKOVA, A. V.

USSR/Chemistry - Adenosinediphosphoric Jan/Feb 1948
Acids

Chemistry - Isomerase

"The Existence of 'Isomerases of Adenosinediphosphoric Acid'," A. V. Kotel'nikova, Lab of Carbohydrates, Inst of Biol and Med Chem, Acad Med Sci USSR, Moscow, 10 pp

"Biokhim" Vol XIII, No 1

Water extracts of partially purified isomerases of adenosinediphosphoric acids (ADF), as well as completely purified ADF contain myokinase. Damping effect of Mg on the ATP or adenosinetriphosphate effect of myosine is noticeable during the fission of ADF by myosine in the presence of myokinase. Adenylic acid is formed when ADF is acted upon by its isomerases. Submitted 10 Jul 1947.

64T25

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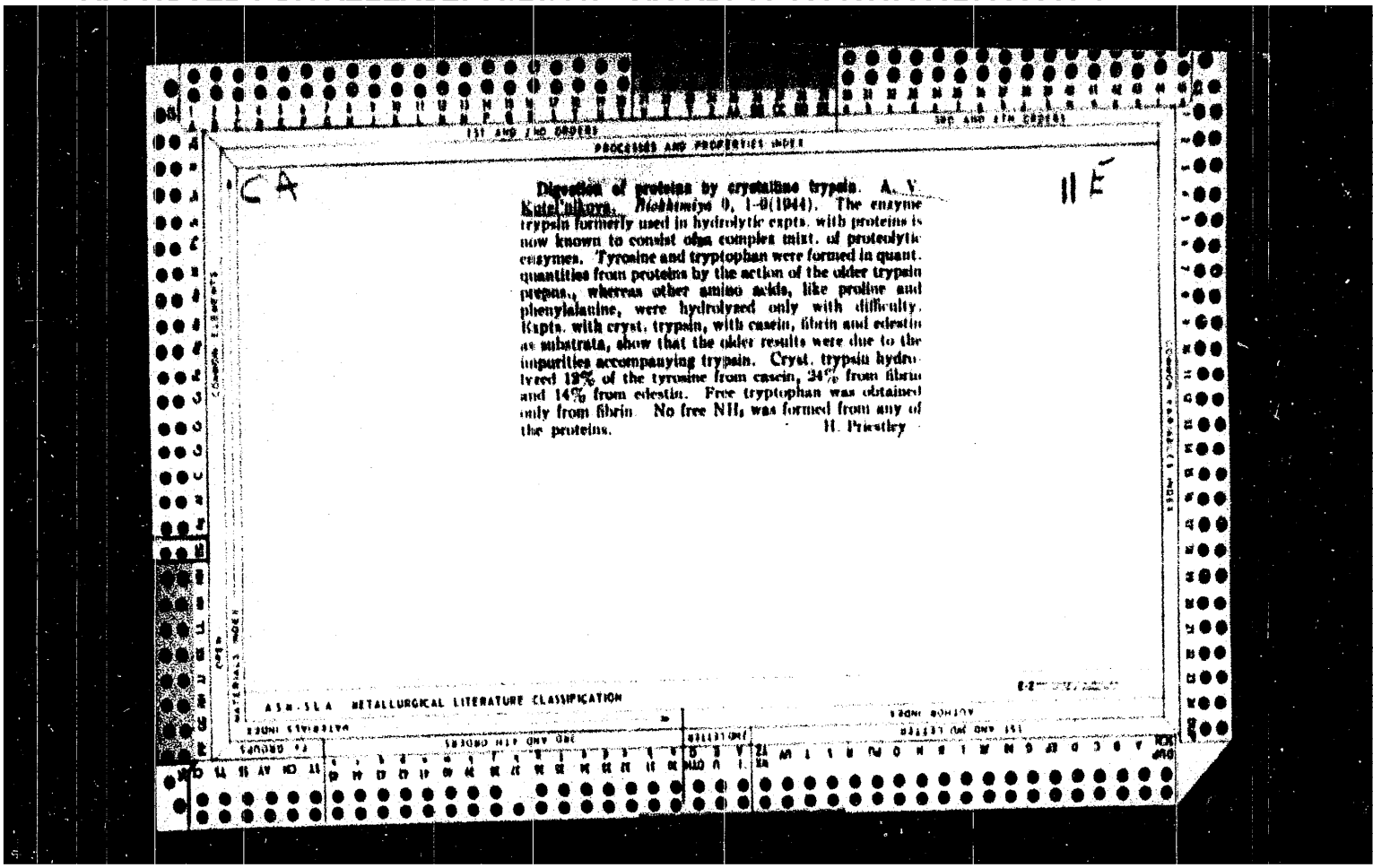

PROCESSES AND PROPERTIES INDEX

CA

11 E

Digestion of proteins by crystalline trypsin. A. V. Kate'Cukova. *Biokhimiya* 9, 1-9(1944). The enzyme trypsin formerly used in hydrolytic expts. with proteins is now known to consist of a complex mixt. of proteolytic enzymes. Tyrosine and tryptophan were formed in quant. quantities from proteins by the action of the older trypsin preps., whereas other amino acids, like proline and phenylalanine, were hydrolyzed only with difficulty. Expts. with cryst. trypsin, with casein, fibrin and celestin as substrata, show that the older results were due to the impurities accompanying trypsin. Cryst. trypsin hydrolyzed 12% of the tyrosine from casein, 34% from fibrin and 14% from celestin. Free tryptophan was obtained only from fibrin. No free NH_3 was formed from any of the proteins. H. Priestley

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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BELOVA, V.I.; SYRKIN, Ya.K.; IPPOLITOV, Ye.G.; KOTEL'NIKOVA, A.S.; BABESHKINA, G.K.; DOVLYATSHINA, R.A.

Magnetic susceptibility of some rhenium compounds. Zhur. strukt.khim. 5 no. 2:281-287 Mr-Ap '64. (MIRA 17:6)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOVA, A.S.; VINOGRADOVA, G.A.

Preparation of rhenium dichloromonoacetate and its derivatives with pyridine and thiourea. Dokl. AN SSSR 152 no.3:621-623 S '63. (MIRA 16:12)

1. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova AN SSSR. Predstavleno akademikom I.I.Chernyayevym.

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOVA, A.S.; VINOGRADOVA, G.A.

Rhenium monochlorodiacetate, its preparation and properties.
Zhur. neorg. khim. 9 no.2:307-311 F'64. (MIRA 17:2)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

Investigation of the Complex Compounds of Bivalent Rhenium

$H_2ReCl_4 \cdot 2\,H_2O$ and the acidous salts NH_4HReCl_4 and $(Py)HReCl_4$ showed that these compounds are thermally stable and decomposable only at 400 - 430°C. From the bivalent compounds of rhenium with acetic acid $ReCl_2 \cdot CH_3COOH$ shows the greatest stability on heat treatment. It decomposes at not less than 300°C. There are 9 figures, 11 tables, and 14 references, 8 of which are Soviet.

SUBMITTED: October 2, 1957

Card 4/4

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

Investigation of the Complex Compounds of Bivalent Rhenium

compounds of other valence the extraction method from aqueous hydrochloric solutions with organic solvents was used. In this it was found that the best extraction of Re^{2-} can be carried out with such organic solvents in which C O occurs; e.g. pinacoline, acetophenone, methylacrylate, dimethylphthalate and others.

Some bivalent rhenium compounds were isolated with methyl alcohol. In the reaction of $H_2ReCl_4 \cdot 2 H_2O$ in glacial acetic acid solution the following compounds form on addition of methyl alcohol:

$ReCl_2 \cdot 4 CH_3COOH$

$ReCl_2 \cdot 2 CH_3COOH \cdot H_2O$

$ReCl_2 \cdot CH_3COOH \cdot H_2O$

$ReCl_2 \cdot CH_3COOH$

On the action of $ReCl_2 \cdot CH_3COH$ with pyridine a solid substance of the following composition is formed: $ReCl_2 \cdot CH_3$ COOH.Py.

Card 3/4 The thermographic investigations of the derivatives of

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Investigation of the Complex Compounds of Bivalent Rhenium

of temperature it decomposes forming oxidation products. $ReCl_2 \cdot 4 H_2O$ on heating to 150°C also looses 2 mol water forming $ReCl_2 \cdot 2 H_2O$. In these two compounds the water can, based on the experimental results, be regarded as coordinatively bound. The formula is given as follows:

$$\left[ReCl_2 \cdot (H_2O)_2\right] \cdot 2 H_2O \quad \text{and}$$
$$\left[ReCl_2(H_2O)_2\right]$$

$H_2ReCl_2 \cdot 2 H_2O$ undergoes some intermediate compounds with the beginning of hydrolysis; these intermediate compounds were also isolated in solid form: $H_2\left[Re(OH)_3Cl\right]$, $H_2\left[Re(OH)_4\right]$, $ReCl_2 \cdot 4 H_2O$ and $ReCl_2 \cdot 2 H_2O$.

Also some acidous salts were isolated in solid form: $KHReCl_4 \cdot H_2O$, $KHReCl_4$, $NH_4HReCl_4 \cdot H_2O$ and NH_4HReCl_4, $(PyH)HReCl_4$.[4]

In the treatment of $H_2ReCl_4 \cdot 2 H_2O$ PyH $HReCl_4$ forms with pyridine in acidous medium.[4] This compound can easily be converted into $\left[ReO_2Py_4\right]Cl$ in the evaporation in air, Re-II transforming into Re-V on this occasion.

Card 2/4 For the purpose of separating bivalent rhenium from rhenium

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78-3-4-30/38

AUTHORS: Kotel'nikova, A. S., Tronev, V. G.

TITLE: Investigation of the Complex Compounds of Bivalent Rhenium (Issledovaniye kompleksnykh soyedineniy dvukhvalentnogo reniya)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 4, pp. 1008-1027 (USSR)

ABSTRACT: The Complex compounds of rhenium-II were produced and investigated. From the experimental material follows: that by the reduction of $KReO_4$ in concentrated hydrochloric acid solution with gaseous hydrogen and under a pressure of from 100 - 110 atmospheric excess pressure and at 300°C solutions can be produced in which rhenium exists in a bivalent form. From the hydrochloric acid solutions of rhenium-II with acetone solution the following products were isolated by crystallization: $ReCl_2 \cdot 4H_2O$ and $H_2ReCl_4 \cdot 2\ H_2O$. Thermographic analyses were carried out with these compounds. $ReCl_2 \cdot 4\ H_2O$ has two endothermal effects at 150°C and 398°C. $H_2ReCl_4 \cdot 2\ H_2O$ loses water at 150°C and with a further rise

Card 1/4

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KOTEL'NIKOVA, A.S.: Master Chem Sci (diss) -- "Investigation of the compounds of divalent rhenium". Moscow, 1958. 15 pp (Acad Sci USSR, Inst of Gen and Inorganic Chemistry im N.S. Kurnakov), 110 copies (KL, No 1, 1959, 114)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOVA, A.P.

ZHEMCHUZHNIKOV, Ye.A.; VERETENNIKOV, A.V.; KOTEL'NIKOVA, A.P.

Determining the transpiration capacity of pine crowns. Fiziol. rast. 2 no.4:397-399 Jl-Ag'55. (MLRA 8:12)

1. Laboratoriya fiziologii rasteniy Lestoekhnicheskoy akademii imeni S.M.Kirova, Leningrad
(Pine) (Plants--Transpiration)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOVA, A. P.

KOTEL'NIKOVA, A. P.- "Shaping of the Annual Ring of Pine in the Wood Formation in Connection with the Moisture Content of the Trunk and of the Cone, Depending on the level of the Ground Water and the Temporary Stay of the Surface Waters." Min of Higher Education USSR, Leningrad Order of Lenin Forestry-Engineering Acad imeni S. M. Kirov, Leningrad, 1955 (Dissertations for Degree of Candidate of Agricultural Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

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KOTEL'NIKOVA, A.I., kand. med. nauk

Treatment of puerperal thrombophlebitis with anticoagulants. Akush. i gin. 39 no.3:85-88 My-Je'63 (MIRA 17:2)

1. Iz klinicheskogo rodil'nogo doma No.1 (glavnyy vrach A.S. Ust'yantseva, nauchnyy rukovoditel' - zasluzhennyy deyatel' nauki RSFSR prof. G.K. Cherepakhin), Gor'kiy.

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KOTEL'NIKOVA, A.I.

Late results of the treatment of lactation mastitis by the intracuteneous administration of penicillin at the focus of the disease. Sbor. nauch. rab. Kaf. akush. i gin. GMI no.1:109-110 '60. (MIRA 15:4)

1. Iz akusherskoy kliniki (zav.kafedroy prof. G.K.Cherepakhin) Gor'kovskogo meditsinskogo instituta imeni S.M.Kirova.
(PENICILLIN) (LACTATION) (BREAST--DISEASES)

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KOTEL'NIKOVA, A.I.

Clinical course of abscessing mastitis following the intracutaneous administration of penicillin at the focus of the disease. Sbor. nauch. rab. Kaf. akush. i gin. GMI no.1:105-108 '60. (MIRA 15:4)

1. Iz akusherskoy kliniki (zav.prof. G.K.Cherepakhin) Gor'kovskogo gos.meditsinskogo instituta.
(PENICILLIN) (LACTATION) (BREAST--DISEASES)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOVA, A.I.

Treatment of initial lactation mastitis by the intracutaneous administration of penicillin at the focus of the disease. Sbor. nauch. rab. Kaf. akush. i gin. GMI no.1:102-104 '60. (MIRA 15:4)

1. Iz akusherskoy kliniki (zav.kafedroy prof. G.K.Cherepakhin) Gor'kovskogo meditsinskogo instituta imeni S.M.Kirova.
(LACTATION) (PENICILLIN) (BREAST--DISEASES)

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KOTEL'NIKOVA, A.I., kand. med. nauk

Intrauterine osteogenesis imperfecta in newborn infants. Akush. i gin. no.1:148-149 '65. (MIRA 18:10)

1. Rodil'nyy dom No.1 (glavnyy vrach Ye.A. Sheronova), Gor'kiy.

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOZEL'TSEVA, A.I., Cand Med Sci --(diss)"Treatment of incipient
[illegible] by means of
[illegible] intracutaneous administration of penicillin over the [illegible]." Gor'kiy, 1952. 13 pp (Gor'kiy
State Med Inst im S.M. Kirov), 200 copies (KL,20-53,103)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOVA, A.I.

Treatment of mastitis in lactation by intracutaneous administration of penicillin. Akush. gin. no. 1:83-85 Jan-Feb 1953. (CIML 24:2)

1. Of the Obstetric Clinic (Head -- Prof. G. K. Cherepakhin), Gor'kiy Medical Institute imeni S. M. Kirov.

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KOTEL'NIKOVA, A. G., VOYNOV, I. N. and FILATOV, V. G.

"The Species Composition and Zonal Distribution of Ixodid Ticks in the Southern Urals."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

Chelyabinsk Oblast Sanitation and Epidemiology Station

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KOTELNIKOVA, A. B.

"Participation of coenzyme A derivative in the phosphorus metabolism in the liver of animals," a paper submitted at the International Conference on Radio isotopes in Scientific Research, Paris, 9-20 September, 1957.

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

YAROSHENKO, Yu.G.; LAZAREV, B.L.; MIKHAYLOV, I.N.; KOTEL'NIKOV, Yu.V.; OVCHINNIKOV, Yu.N.

Continuous measurement of cast iron temperatures during its tapping. Stal' 22 no.4:300-302 Ap '62. (MIRA 15:5)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat i Ural'skiy politekhnicheskiy institut.
(Blast furnaces) (Pyrometry)

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KOTEL'NIKOV, Yu.V.

Milling straight gear teeth. Stan. i instr. 29 no.7:20-22 J1 '58. (MIRA 11:9)

(Gear cutting)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOVTUNKOV, Yu.V., Cand Tech Sci--(diss) "Study of the ~~treatment~~ process of machining ~~ment~~ of ~~articles~~ parts with a rectilinear outline of ~~gears~~ teeth by the method of gear-grinding." M., 1958. 15 pp (Min of Higher Education USSR. Mos Machine-Tool and Instrument Inst im I.V.Stalin. All-Union Sci Res Instrument Institute VNII), 150 copies (KL, 7-58, 13)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

ACC NR: AP6033419

different operating conditions: the duration of the discharge was 12 or 20 millisec; the magnetic field strength ranged from 12 to 25 kOe; the initial hydrogen pressure varied from 6×10^{-5} to 4×10^{-4} torr; and the linear temperature was varied between 20 and 500° C. Some of the data are presented graphically and are discussed. With the aid of the material balance equation, a technique is developed for deriving the lifetime of an ion in the plasma from the gas pressure measurements, the usual measurements of plasma density and radius of the plasma filament, and the known or assumed cross sections for charge exchange and ionization of atoms and molecules in the plasma. The ion lifetime was found to increase with increasing magnetic field strength and to be very sensitive to other characteristics of the plasma. Investigation of these relationships is being continued. The ion lifetime was found to be somewhat less than the duration of plasma confinement under all the investigated conditions, and the plasma density was found to be about equally determined by the ion lifetime and the lifetime of an absorbed atom on the linear. Orig. art. has: 3 formulas and 10 figures.

SUB CODE: 20 SUBM DATE: 15Nov65 ORIG. REF: 010 OTH REF: 007

Card 2/2

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

ACC NR: AP6033419 SOURCE CODE: UR/0057/66/036/010/1831/1841

AUTHOR: Gorbunov,Ye.P.; Kotel'nikov,Yu.N.; Kutukov,G.P.; Simonov,V.A.

ORG: none

TITLE: Investigation of the material balance between the plasma filament and the gaseous shell in the Tokamak-3 toroidal machine

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 10, 1966, 1831-1841

TOPIC TAGS: hydrogen plasma, plasma confinement, gas pressure, ionization gage, gas absorption, ion lifetime

ABSTRACT: The authors have employed specially designed ionization gages to record the pressure of the neutral gas surrounding the plasma filament during operation of the Tokamak-3 machine, and with the aid of the data thus obtained they discuss the exchange of material between the plasma, the surrounding gas, and the stainless steel linear of the toroidal discharge chamber. The electron beam of the ionization gage was modulated to make it possible to distinguish the ionization gage signal against the noise background from the main discharge. Each instrument consisted of two identical ionization gages in a single envelope; one gage of the pair was usually operated with a cold cathode and its signal was subtracted from that of the normally operated gage to reduce the noise background. Entrance of charged particles into the ionization gage was prevented by an electrostatic trap. Data were recorded under

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KOTEL'NIKOV, Yu.B.

Practice of the Kuznetsk Basin Economic Council in the mechanization of information services. Biul.tekh.-ekon.inform.Gos.nauch.-issl. inst.nauch.i tekh.inform. 16 no.8:68-70 '63. (MIRA 16:10)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOV, Yu.B.

Mechanization of inquiry and information work. Biul.tekh.-ekon. inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 16 no.6:77 '63. (MIRA 16:8)
(Information services--Equipment and supplies)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

TUBENSHLYAK, Z.L.; KOTEL'NIKOV, Ye.F.

Controlling and readjusting device for centerless grining machines. Trakt. i sel'khozmash. 31 no.3:41-42 Mr '61. (MIRA 14:3)

1. Nauchno-issledovatel'skiy institut tekhnologii traktornogo i sel'skokhozyaystvennogo mashinostroyeniya.
(Grinding machines)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOV, Ye.F.

Automatic devices for checking external and internal plates of a bushed roller chain. Biul.tekh.-ekon. inform. no.3:37-38 '61. (MIRA 14:3)

(Chains—Testing)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOV, V. V.

"Calculation of an unsteady temperature field of a multilayer wall."

report submitted for 2nd All-Union Conf' on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Ural' Branch, AS and A, USSR

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

DEMIN, G.I.; PLUZHNIKOV, A.I.; CHURAKOV, A.M., inzh.; ZHILIN, I.S., inzh.; MAKAROV, D.M., inzh.; LEBEDEV, N.D., inzh.; SHISHLOV, D.D., inzh.; IGLIN, V.P., inzh.; YEVLAYEV, E.S., laborant; KISELEV, V.V., laborant; KOTEL'NIKOV, V.V., laborant; TYULENEVA, N.I., laborant

Transfer of a holding furnace to heating by natural gas with self-carburation. Stal' 23 no.8:755-758 Ag '63. (MIRA 16:9)

1. Moskovskiy institut stali i splavov (for Demin, Pluzhnikov).
(Furnaces, Heating)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

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Report presented at the Conference on Heat and Transfer.
Minsk, USSR, 5-10 June 61.

RM-2852
57

306. P. T. Smunkovskaya, External Heat and Mass Transfer at Drying of Food Stuffs by Freeze-Drying.

307. G. S. Konokotin, Heat and Mass Transfer at Freezing of Fish.

308. V. V. Kotelnikov, Investigation of Thermal Engineering Properties of Constructions under Natural Conditions.

309. K. S. Strelkova, Determination of Temperature on the Inner Surface of Panel Joints by Calculation Methods.

310. S. L. Frid, Basis Heat Transfer Problems at Large Water Engineering Structures Design.

311. M. Ya. Boitman, On Application of the Transient Heat Transfer Theory For Design of Refractoriness of Constructions.

312. Yu. P. Barsky, Investigation of Thermal Parameters of the Process of Ceramic Baking for Determination of the Optimum Baking Curve.

313. M. Sh. Yagfarov, Determination Methods of Thermal Values on the Basis of Quasi-Stationary Heating Regime.

314. A. B. Verzhinskaya, The Method of Constant Power Source.

315. P. G. Alekseev, Complex Determination of Thermal Properties of Polymers and Investigation of their Dependence on Temperature and Pressure.

316. B. P. Pashaev, Change of Thermal Conductivity of Some Metals and Alloys at Melting.

317. Kh. I. Amirkhanov, A. P. Adamov, L. N. Levina, Thermal Conductivity of Carbon Dioxide Along the Boundary Curve, Including the Critical Region.

318. D. N. Kolbanov, Investigation of Heat Transfer and Thermal Properties of Carbon Dioxide in the Critical Region of Thermodynamic State.

319. V. I. Petrovichev, L. S. Kokarev, New Transient Method of Heat Transfer Coefficient Measurement.

320. V. B. Lecnas, Experimental Investigation of Heat Transfer under the Free Molecular Flow Conditions.

KOTELNIKOV, V.V.

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

The Isotopic Effect in the ethylamine

SOV/156-59-2-6/48
Mutual Solubility of Water and Tri-

with the measuring results. An isotopic exchange occurs in solutions of triethylamine and heavy water. Under experimental conditions (concentration of triethylamine 35% by weight) 1 - 1.5% of the deuterium atoms passed over into triethylamine. There are 1 figure, 1 table, and 3 references, 1 of which is Soviet.

PRESENTED BY: Kafedra teoreticheskoy khimii Ural'skogo politekhnicheskogo instituta im. S. M. Kirova
(Chair of Theoretical Chemistry, Ural Polytechnic Institute imeni S. M. Kirov)

SUBMITTED: September 22, 1958

Card 2/2

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21(1), 5(4)
AUTHORS: Kotel'nikov, V. V., Skripov, V. P.

SOV/156-59-2-6/48

TITLE: The Isotopic Effect in the Mutual Solubility of Water and Triethylamine (Izotopnyy effekt vo vzaimnoy rastvoritel'nosti vody i trietilamina)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1959, Nr 2, pp 248-249 (USSR)

ABSTRACT: The solubility in the systems $(C_2H_5)_3N - D_2O$ and $(C_2H_5)_3N - H_2O$ is investigated. A diagram (Fig 1) shows the experimental results. The solubility is reduced in heavy water, the critical temperatures amount to 17.86° for H_2O and to 14.05° for D_2O; thus the difference is negative. For different deuterium content of the water the change of the critical temperature in the case of an equal concentration of weight of triethylamine is calculated in the following way: $t_x = t_{H_2O} - c_x(t_{H_2O} - t_{D_2O})$ (t_{H_2O}, t_{D_2O} denote the temperature limit values at 100% H_2O and D_2O, respectively). A table gives the values for c_x. They are in good agreement

Card 1/2

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KOTEL'NIKOV, V. S.

Spindle Tree

Greater attention to natural thickets of the spindle tree. Les. khoz. 5, No. 7.

9. Monthly List of Russian Accessions, Library of Congress, September 1952 Unclassified.

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOV, Vladimir Pavlovich, inzh.

Errors of digital comparison devices with various balancing methods. Izv. vys. ucheb. zav.; elektromekh. 8 no.1:73-82 '65.
(MIRA 18:3)

1. Krasnodarskiy zavod elektroizmeritel'nykh priborov.

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KOTEL'NIKOV, Vladimir Pavlovich, inzh.

Characteristics of a double T-type filter with variations of its parameters. Izv.vys.ucheb.zav.; elektromekh. 7 no.11:1372-1380 '64. (MIRA 18:3)

1. Krasnodarskiy zavod elektroizmeritel'nykh priborov.

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KOTEL'NIKOV, V.P.

"Treatment of obliterating vascular diseases with antiangiotensin." Nauch. trudy Riaz. med. inst. 15:210-213 '62. (MIRA 17:6)

1. Kafedra obshchey khirurgii (zav. kafedroy - prof. V.G.Shimanko) Ryazanskogo meditsinskogo instituta imeni Pavlova.

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KOTEL'NIKOV, V.P.; TARNOVSKIY, I.Ya.; PUCHKOV, S.G.

Nomograms for the calculation of increases in width and forces in forge drawing. Kuz.-shtam. proizv. 5 no.12:6-10 D '63. (MIRA 17:1)

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L 21935-66
ACC NR: AP6014485

with an average of 46.0×10^{-1}. During the days with precipitation, the concentration of radioactive products in the atmosphere decreased and the activity of the fallout increased. The average concentration of natural radioactive products from the decay of radon and thoron were found to be 9.2×10^{-1} and 17.7×10^{-1} disintegrations/sec m^3, respectively. Thus, the radon daughter concentration was higher by three orders of magnitude than that of aerosols containing long-lived radioactive fission products. The following nuclides were identified in the atmospheric samples: ^{144}Ce, $^{106}Ru + ^{106}Rh$, ^{137}Cs, and ^{54}Mn. The data agreed with other published values but they indicated a slight increase of the concentration and a reduction of the density of the average daily fallout at the Black Sea region in comparison with results obtained during the ninth cruise of the ship in October 1960. Orig. art. has: 2 figures and 1 table. [NA]

SUB CODE: 18, 04 / SUBM DATE: 19Mar65 / ORIG REF: 001

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L 21935-66 EWA(h)/EWT(l)/EWT(m)/FCC GW

ACC NR: AP6014485 SOURCE CODE: UR/0089/65/019/005/0469/0470

AUTHOR: Kotel'nikov, V. P.; Markelov, V. N.; Nelepo, B. A.

ORG: none

TITLE: New data on the atmospheric radioactivity and fallout density near the Black sea

SOURCE: Atomnaya energiya, v. 19, no. 5, 1965, 469-470

TOPIC TAGS: atmospheric radioactivity, research ship, scintillation spectrometer, radioactive fallout, radioactive aerosol, radon, thoron, cesium, cerium, manganese, ruthenium, rhodium

ABSTRACT: During August and September 1964, at the time of the 16th cruise of the research ship Mikhail Lomonosov, the artificial radioactivity of the atmosphere over the Black Sea was determined. The concentration and isotopic composition of the radioactive elements in the lower layers of the atmosphere, the density, and short-lived isotope concentration of the fallout were measured. The aerosols were collected by means of a 225 m^3/hour capacity air filtering system while the fallout samples were obtained from the deposits of trays containing oil-soaked filter paper, placed at a height of 14 meters over the surface of the water. A scintillation spectrometer was used to determine the isotopic composition from 8.9 to 66.6 x 10^{-4} disintegrations/sec m^3, with an average value of 34.4 x 10^{-4}. The average density of the long-lived radioactive fallout at sea level ranged from 3.3 to 221 x 10^{-1} disintegrations/sec m^2,

Card 1/2 UDC: 551.577.7:541.182.2/3

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KOTEL'NIKOV, V.P.; MARKELOV, V.N.; NELEPO, B.A.

Recent data on atmospheric radioactivity and the fallout density in the Black Sea Basin. Atom. energ. 19 no.5:469-470 N '65.
(MIRA 18:12)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOV, V.P.

Some functional disorders following surgical interventions on the sympathetic nervous system. Nauch.trudy Ryaz.med.inst. 18 no.2:178-183 '64. (MIRA 19:1)

1. Kafedra obshchey khirurgii (zav. - prof. Ye.G.Gurova) Ryazanskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

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KOTEL'NIKOV, V.P. (Rostov-on-the-Don)

Nomogram linking Weibull distribution parameters with probabilities. Teor. veroiat. i ee prim. 9 no.4:743-746 '64.
(MIRA 17:12)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOV, V.P.

Asymptotic method of solving variational problems in metal-working by pressure. Izv. vys. ucheb. zav.; chern. met. 7 no.8:116-122 '64. (MIRA 17:9)

1. Ural'skiy politekhnicheskiy institut.

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L 13548-63 EWS

ACCESSION NR: AP3005525 S/0115/63/000/007/0023/0025

AUTHOR: Kotel'nikov, V. F. [redacted]

47

TITLE: Determining errors of digital instruments with digit

SOURCE: Izmeritel'naya tekhnika, no. 7, 1963, 23-25

TOPIC TAGS: measurement, measuring instrument, digital voltmeter, digital ohmmeter

ABSTRACT: Errors of digital voltmeters and ohmmeters consist of the following components: (1) measuring-circuit error due to resistor instability, aging, etc.; (2) error due to finite sensitivity of zero detector; (3) discrete error due to finite value of the lowest step of compensating quantity. Each component is analyzed theoretically in detail with the following conclusions offered: (1) a limited minus error in resistors is preferable; (2) a too-high resolution of the balancing circuit should be avoided; (3) and (4) purely theoretical points (an editorial note states that these points "can hardly serve as practical recommendations").

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CHIZHIKOV, Yuriy Mikhaylovich; KOTEL'NIKOV, V.P., red.;
GOROBINCHENKO, V.M., red.izd-va; KARASEV, A.I., tekhn. red.

[Modeling the rolling process] Modelirovanie protsessa prokatki. Moskva, Metallurgizdat, 1963. 123 p. (MIRA 16:7)
(Rolling (Metalwork))--Mathematical models)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

TARNOVSKIY, Iosif Yakovlevich; PAL'MOV, Yevgeniy Vasil'yevich; TYAGUNOV, Vladimir Arkad'yevich; MAKAYEV, Sergey Vladimirovich; KOTEL'NIKOV, Veniamin Petrovich; ANDREYUK, Leonid Vasil'yevich. Prinimal uchastiye KOTSAR', S.L.; LYASHKOV, V.B., red.; SKOROBOGACHEVA, A.P., red.izd-va; DOBUZHINSKAYA, L.V., tekhn. red.

[Rolling on a blooming mill] Prokatka na bliuminge. Moskva, Metallurgizdat, 1963. 388 p. (MIRA 16:10)
(Rolling (Metalwork))

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

TARNOVSKIY, I.Ya.; POZDEYEV, A.A.; KOLMOGOROV, V.L.; VAYSBURD, R.A.; GUN, G.Ya.; KOTEL'NIKOV, V.P.; TARNOVSKIY, V.I.; SKOROKHODOV, A.N.

[Variational principles of mechanics in the theory of metal-working by pressure] Variatsionnye printsipy mekhaniki v teorii obrabotki metallov davleniem. Moskva, Metallurgizdat, 1963. 52 p. (MIRA 17:5)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

KOTEL'NIKOV, V. P.

Measuring circuits of digital voltmeters with parallel voltage dividers. Izm. tekh. no.10:37-42 O '62. (MIRA 15:10)

(Voltmeter)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

TARNOVSKI, I.I. [Tarnovskiy, I.I.]; KOTELNIKOV, V.P. [Kotel'nikov, V.P.]

Depth of the zone of plastic deformation at the lamination of high bars. Analele metalurgie 16 no.2:163-175 Ap-Je '62.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6

TARNOVSKIY, I.Ya.; KOTEL'NIKOV, V.P.

Theoretical investigation of specific pressure and force during rolling on blooming mills with use of variation principles. Izv. vys. ucheb. zav.; chern. met. no.2:47-52 '60. (MIRA 15:5)

1. Ural'skiy politekhnicheskiy institut.
(Rolling mills)

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KOTEL'NIKOV, V.P.

Measuring circuit of an automatic digital bridge. Izm.tekh. no.11:39-42 N '61. (MIRA 14:11)
(Bridge circuits)

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KOTEL'NIKOV, V.P.; LYASHKOV, V.B.

Application of dimensional analysis to the theory of rolling. Izv. vys. ucheb. zav.; chern. met. 4 no.8:84-88 '61. (MIRA 14:9)

1. Ural'skiy politekhnicheskiy institut.
(Rolling (Metalwork)) (Dimensional analysis)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300013-6